Homosexuality and Co-Morbidities: Research and Therapeutic Implications

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Abstract

Clients who present to therapists with unwanted same-sex attraction (SSA) often have co-occurring problems. Reliable surveys in a survey of the literature show that a score of mental health conditions in almost every DSM category are present in the general SSA population at rates three or more times greater than in the opposite-sex attraction (OSA) population. These conditions include bipolar disorder, obsessive-compulsive disorder, and schizophrenia, but more predominantly consist of mood disorders, depression, substance abuse, and suicidality. All need particular attention from therapists.

People reporting SSA have a more widespread and intense psychopathological burden than probably any other group of comparable size in society, though college-age people may have more substance abuse problems. The reversed gender pattern of these conditions suggests some link with SSA itself. Surveys in recent literature suggest that *perceived* discrimination rather than objective discrimination is to blame for suicidality. Recent literature also finds that particular emotion/avoidant-based coping mechanisms used by people reporting SSA almost entirely account for the effects of this perceived discrimination.

Statistical analysis suggests that therapists should not assume that their therapies will create undue suicidality, but they should nonetheless maintain normal vigilance.

Introduction: Context of This Paper

The American Psychological Association (APA) has publicly asserted that there is no evidence that therapy for same-sex attraction (SSA) works. On the contrary, the association asserts that such therapy has a risk of harm; it also asserts that there is no evidence for greater pathology associated with homosexuality, which it believes negates the need for intervention. Members of the National Association for Research and Therapy of Homosexuality (NARTH Scientific Advisory Committee, 2009) prepared a comprehensive review to examine these claims; the present paper is an update, focusing mostly on the question of greater pathology among SSA people and its implications for therapists. The literature demonstrates that pathology as defined by the DSM is very widespread among people with SSA.

The nomenclature for homosexuality continues to be cumbersome. The literature uses a variety of terms—including SSA, MSM, WSW, homosexual, gay, bisexual, lesbian, GLB, and variants of these—to describe people who are attracted to and/or have sexual relations with members of the same gender. These people may be defined in the literature based on attraction only, on self-identity, or on actual behavior. Since attraction is commonly considered most fundamental, this paper will use SSA to define those who are same-sex attracted. Where a cited paper uses other terms that have a meaning important for the context, those terms are used for clarity.

When examining the mental health of SSA people, Bailey (1999) commented that historically those who belonged to SSA interest groups appeared to be healthy, while those who were seeing therapists and clinicians appeared to be sick. This is an obvious case of sample bias affecting the results. Reliable statements about the SSA population as a whole depend on good random samples; the papers cited here, most from 1998 or later, use those dependable random samples. Limitations are stated as appropriate.

This paper frequently refers to numbers that are odds ratios (OR). OR express how much more frequently the SSA group contains the specified condition than do

members of a properly sampled OSA group. If a paper gave an OR of 3 for suicidality in an SSA sample, that means three times as many attempted suicides occur in the SSA group as occur among the OSA group.

In these studies it is useful to note the epidemiological rule of thumb: An OR of 3 with adequate statistical significance is quite high. This difference is so great that another similar study will almost certainly confirm it within a margin of error. An OR of 2 means the findings will be probably be confirmed by another study. Obviously, then, the OR data in this paper are solid enough to be trusted.

This paper generally presents only those studies that found a statistically significant difference. Small differences when compared to the control groups may still exist. Non-significant differences are labeled as "NS." Unless explicitly stated, a mental health issue for gay men may not apply to lesbians, and vice versa.

The categories and correct diagnostic procedures for disorders were taken from the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV-R*,* American Psychiatric Association, 2000) as applicable. Individual details are in the cited papers.

These results could be quite discouraging to those with SSA. These people should realize that change of many types is taking place during therapy—and even outside of therapy—in spite of any conditions that may exist alongside SSA. The major categories of co-occurring conditions include substance abuse and depression, which affect most of the general population at some time to a greater or lesser degree.

The following material contains visual representations not strictly necessary for those used to handling the statistical numerical data. The reader's indulgence is requested.

In the histograms that follow, the word *homosexual* is occasionally used to define a combination of gay and lesbian people. The comparison is to heterosexuals, who are assigned a histogram bar length of 1.0. Other control groups are similarly assigned a histogram bar length of 1.0.

One overall finding is worth noting: among heterosexuals, the most typical mental health issues are mood disorders for women and substance abuse issues for men. These are reversed in SSA people, a phenomenon that will be further discussed in the paper.

Odds Ratios Results

The conditions that follow are given in approximate order of ascending OR.

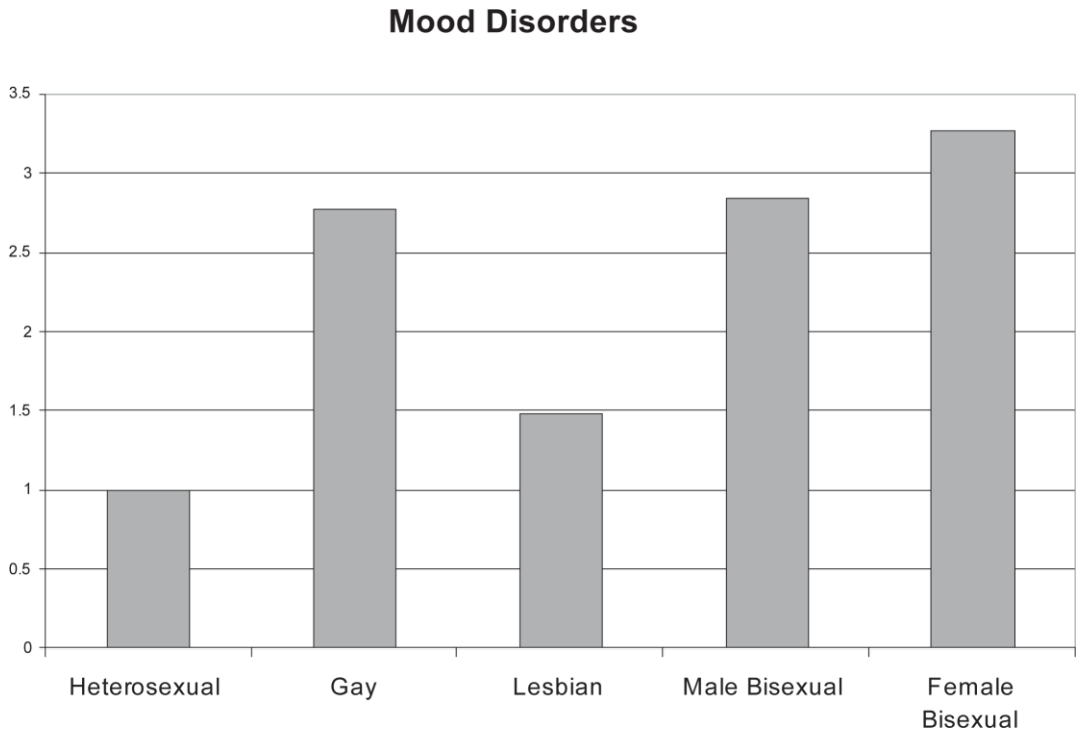

Figure 1. Mood Disorders, OR 2.78 SSA men, 1.48 SSA women (Tjepkema, 2008; Canada). Bisexual for male and female from the same reference is also given.

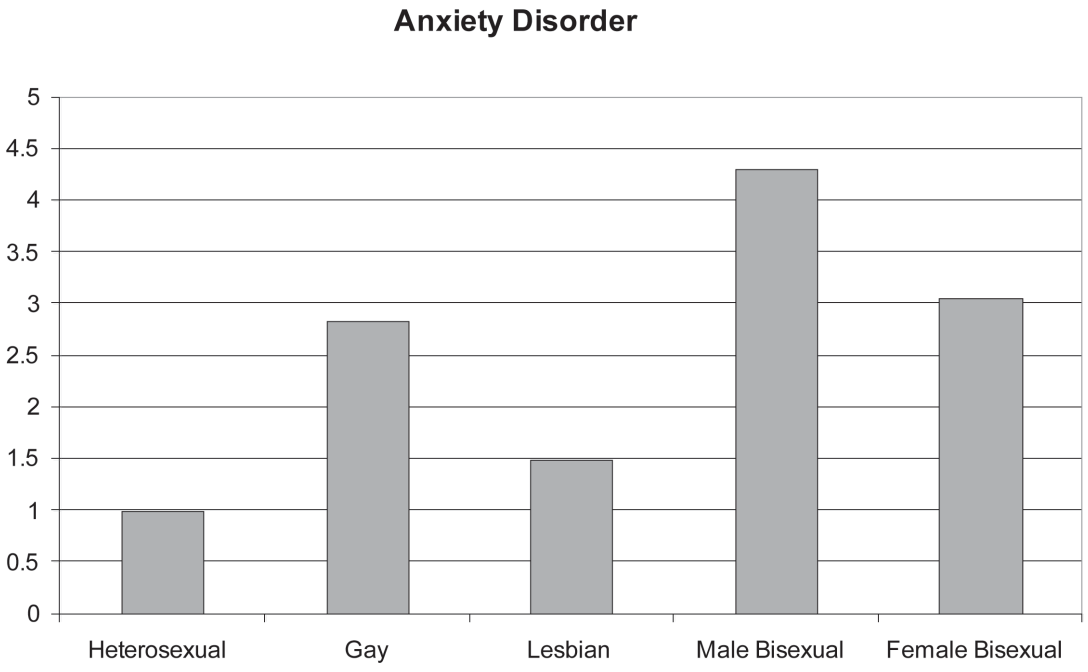

Figure 2. Anxiety Disorder, OR 2.83 men, 1.50 women (Tjepkema, 2008; Canada).

Both surveys were conducted by StatCanada and are considered to be very high quality. The bisexual figures tend to be highest.

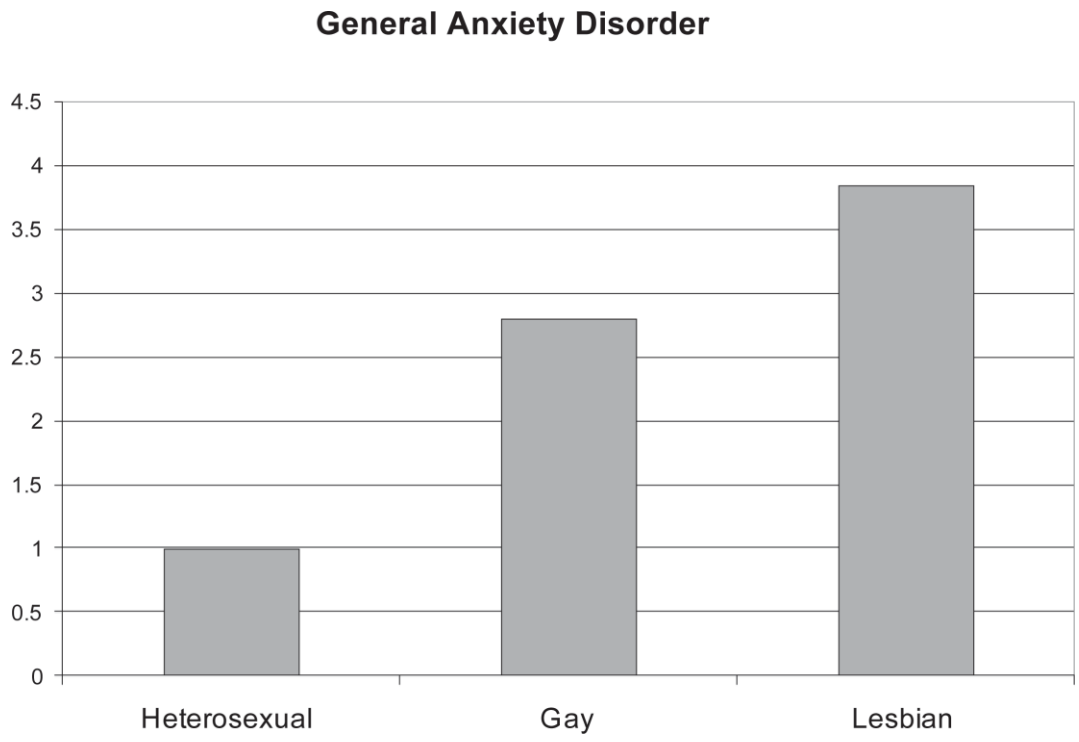

Figure 3. Generalized Anxiety Disorder, OR 2.8 men, 1.2–6.5 women. The figures for women are a range for a variety of diagnostics; in this paper means will be plotted (Fergusson, Horwood & Beautrais, 1999; New Zealand longitudinal study).

These results are reasonably close to those in Figure 2, even though New Zealand and Canada are geographically distant.

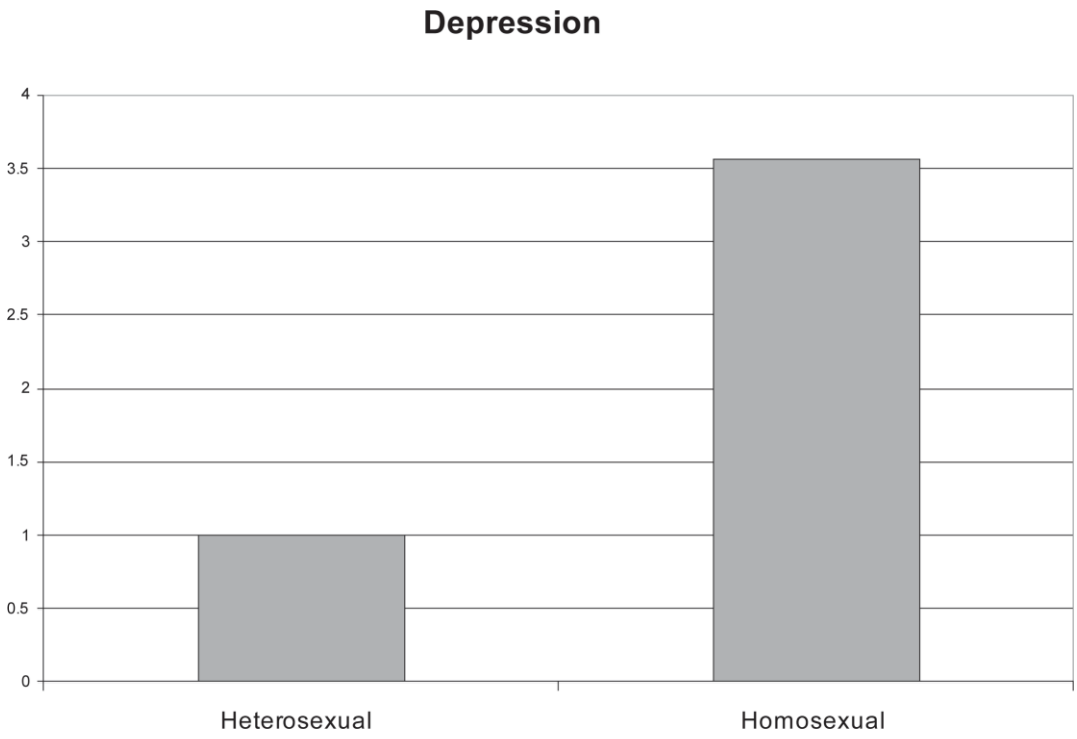

Figure 4. Depression, OR 3.5 (Cochran, Sullivan, & Mays, 2003; United States).

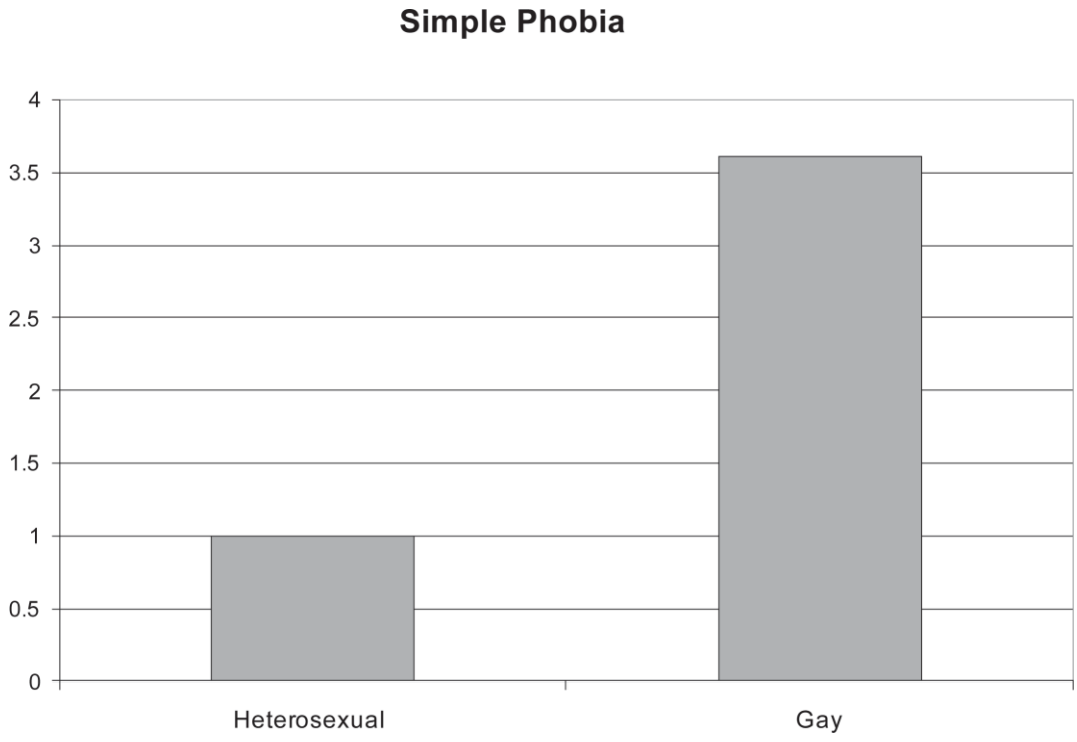

Figure 5. Simple Phobia, OR 3.61 men, 1.27 (NS) women; latter not plotted (Cochran et al., 2003).

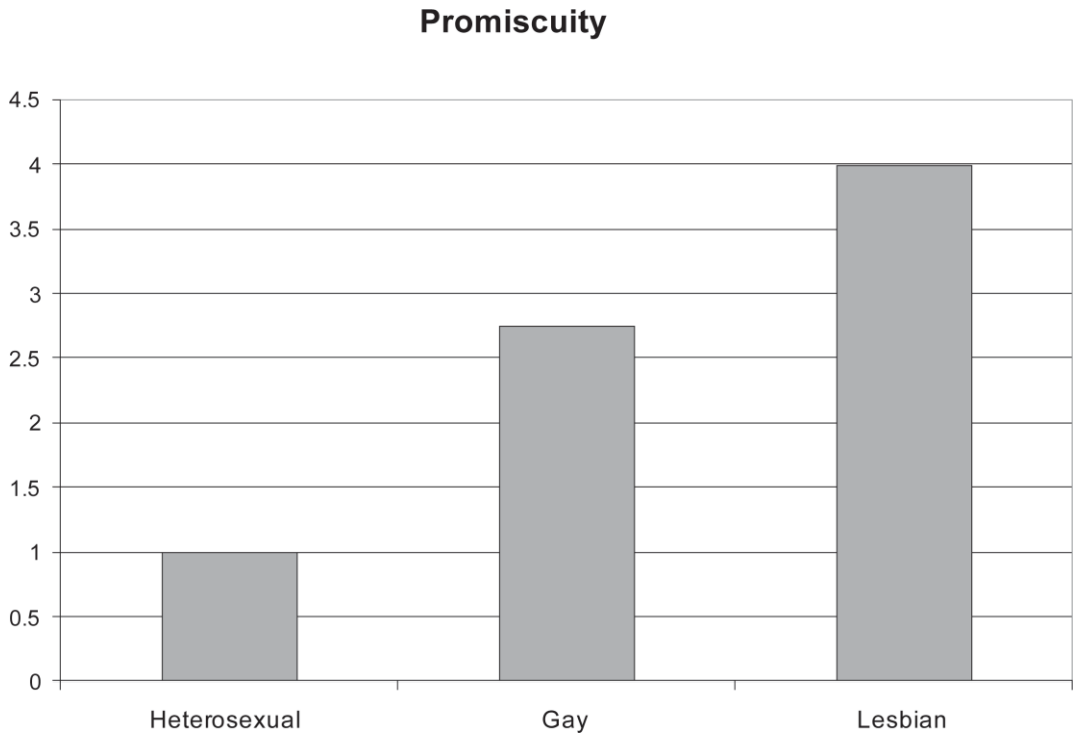

Figure 6. Promiscuity, OR 2.75 men, 4 women (Laumann, Gagnon, Michael, & Michaels, 1994; United States). Medians are used. The issue is whether hypersexuality exists; a later discussion on sexual compulsivity indicates this is likely.

This data is confirmed by a survey on promiscuity in the UK (Mercer, Hart, Johnson, & Cassell, 2009); the survey took place 1999–2001 and involved 5,168 men. During the five years preceding the survey, the median number of partners for heterosexual, bisexual, and exclusively homosexual men were 2, 7, and 10, respectively. The bisexual men had 3.5 times the number of partners as did the heterosexual men; among exclusively homosexual men, the number was 5 times as many partners as with the heterosexual men.

It should be noted that among young heterosexual people, particularly girls, early romantic involvement leads to depression (Davila et al., 2009; Sabia & Rees, 2008). Depression also predicted sexual involvement, indicating a kind of vicious circle. One

interpretation could be that failing to find the ideal partner even after many attempts might lead to depression. This mechanism might also apply to those with SSA, who tend to be sexually involved at younger ages than their heterosexual counterparts.

Partner Interpersonal Violence

The issue of violence between partners is particularly controversial and conceptually complex. Most of the samples have not been truly random or have been equivocal about sex or the relationship of the perpetrator. It's interesting to note that the better the sample, the lower the ORs seem to be. The most truly random samples with the most detailed results seem to be those reported by Tjaden, Thoennes, and Allison (1999, United States); therefore, those are the results predominantly used in this paper. Both marriage and cohabitation were included. The survey was careful to ask whether the violence had occurred during adulthood and whether it had occurred between same-sex or opposite-sex partners. The survey was not restricted to current partnerships, a tactic that likely improved the integrity of the data because violence may disrupt a partnership.

Results show that men in same-sex couples are three times as likely to suffer violence from their male partners as men in opposite-sex couples experience violence from their wives (OR 3.0). Because of social convention and physical disparity, it is not surprising that men in opposite-sex partnerships experience less violence. This makes the histogram below rather hard to interpret adequately.

Typically, lesbian relationships are considered to be violent. However, this survey found that the violence inflicted by women on women partners was statistically the same as the violence suffered by men at the hands of their female partners. Either of the two ORs might have been plotted as statistically indistinguishable, but the one used is 1.5. It is true that lesbians suffer a lot of general violence, but such violence was often perpetrated by men; about half of the SSA women in the survey had previously been in an opposite-sex relationship.

The same low prevalence of violence among lesbian couples was supported by Schraiber, Oliveira, and Franca-Junior (2008). While the low violence rate among lesbian couples is contrary to anecdotal impressions and to the impression given in the literature, other studies were either ambiguous, not random, or did not compare the lesbian couples to heterosexual control groups. An impression of general extreme violence can easily arise if there are rare extreme cases of violence that attract attention, but proper random surveys are more reliable.

Figure 7. Violence in same- and opposite-sex couples, OR 3.0 men, 1.5 women

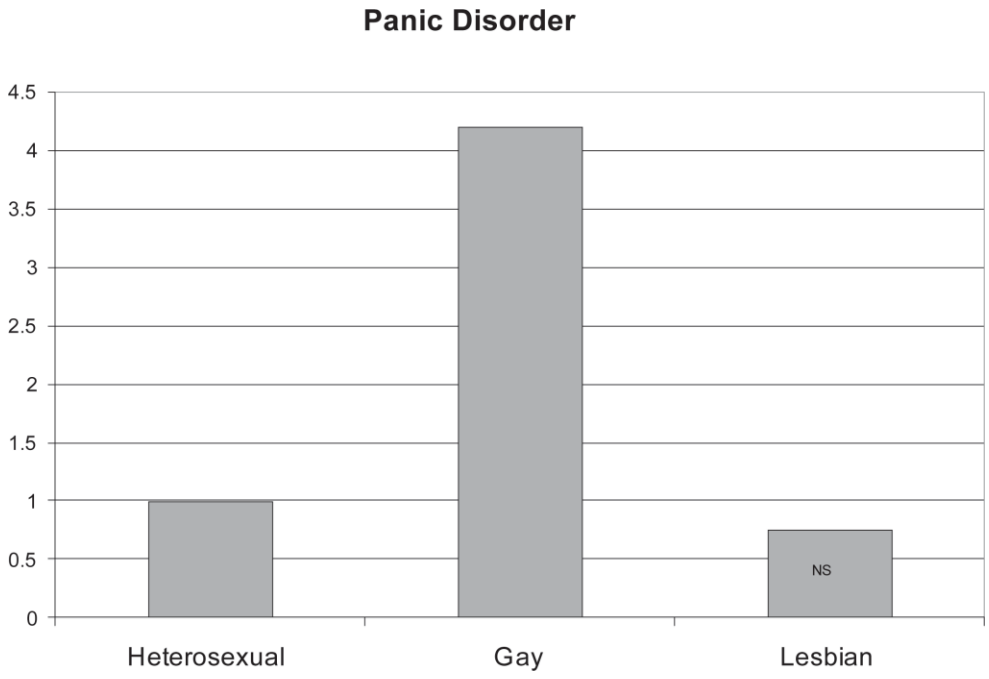

Figure 8. Panic Disorder, OR 4.21 men, 0.75 (NS) women (Sandfort, de Graaf, Bijl, & Schnabel, 2001; Netherlands).

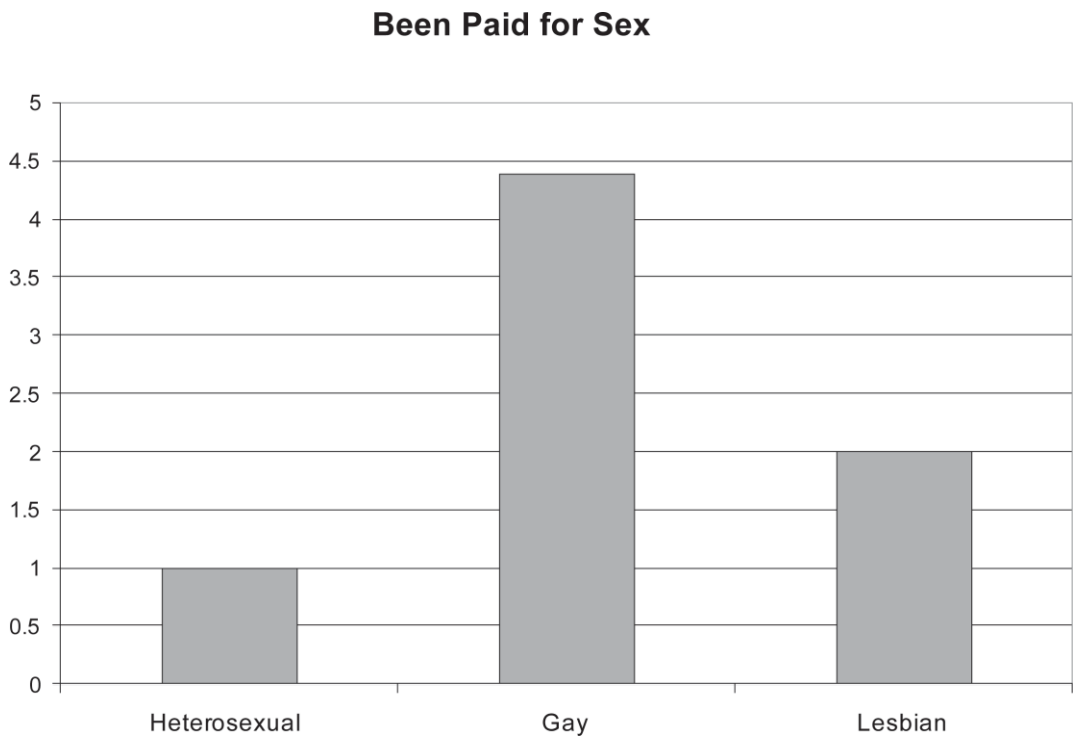

Figure 9. Been Paid for Sex, OR 4.4 men, 2.0 women (Schrimshaw et al., 2006; United States) Comparative OSA data are derived from Smith (1998) and Turner et al. (1998). The data included payment in kind, such as accommodation or food.

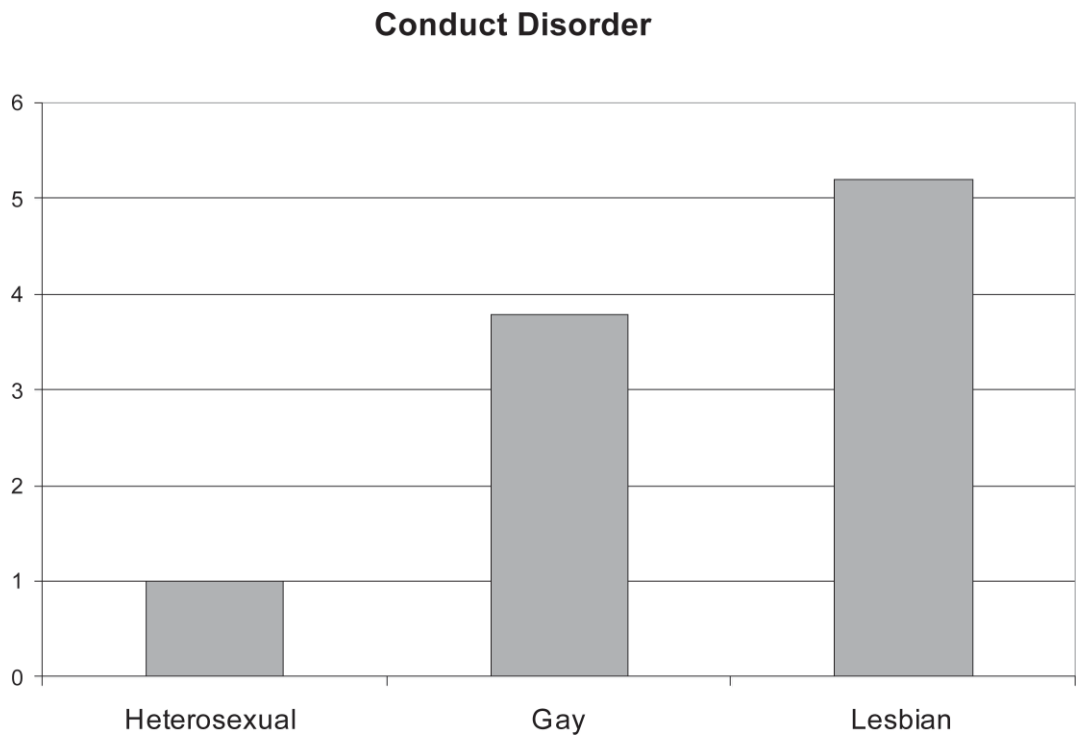

Figure 10. Conduct Disorder, OR 3.8 men, 8.7 women (Fergusson et al., 1999; New Zealand). A mean figure is used for the women's data range.

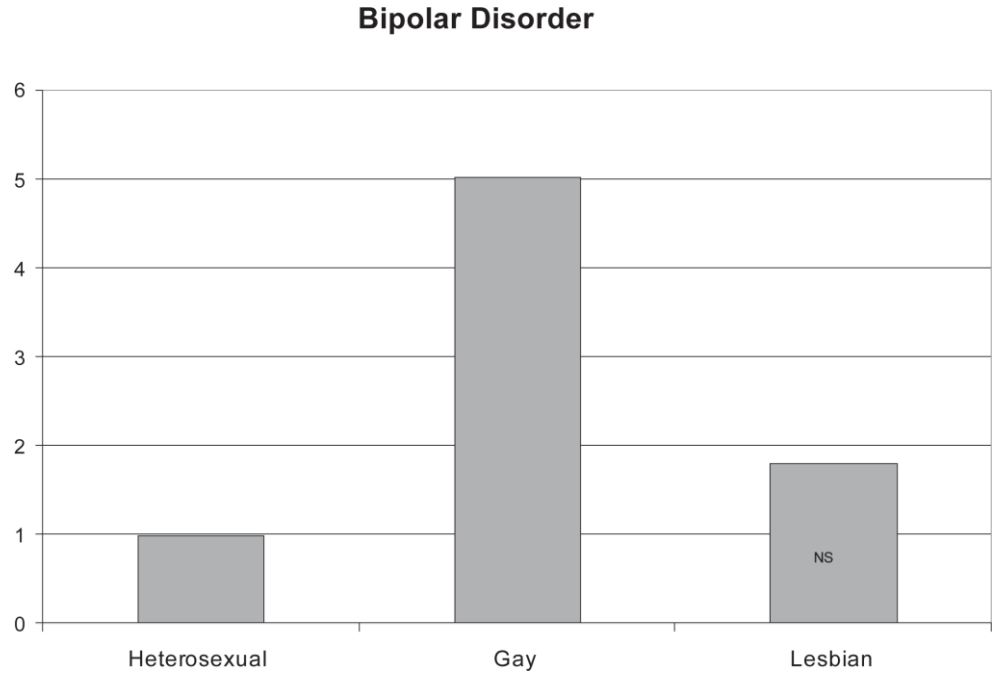

Figure 11. Bipolar Disorder, OR 5.02 men, 1.8 (NS) women (Sandfort et al., 2001; Netherlands).

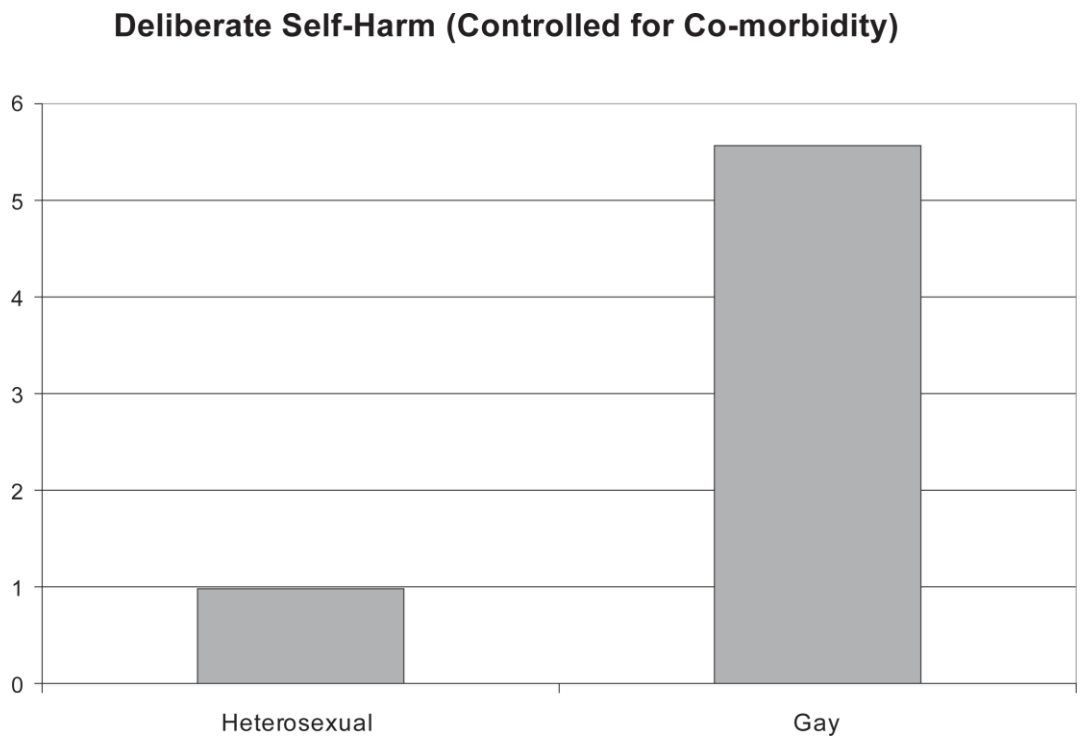

Figure 12. Suicidality, OR 2.58–10.23 men (various symptoms; the mean is plotted), 2.12 women. The figure for women was completely accounted for by contribution from various other mental health problems, such as depression, and is not plotted (de Graaf, Sandfort, & ten Have, 2006; Netherlands).

The large survey of Steele, Ross, Dobinson, Veldhuizen, and Tinmouth (2009; Canada) also found significant excess of suicidality. See also the study of Reed, Prado, Matsumoto, and Amaro (2010; United States), which found an OR of 6.6 for SSA college students. See below for in-depth discussion.

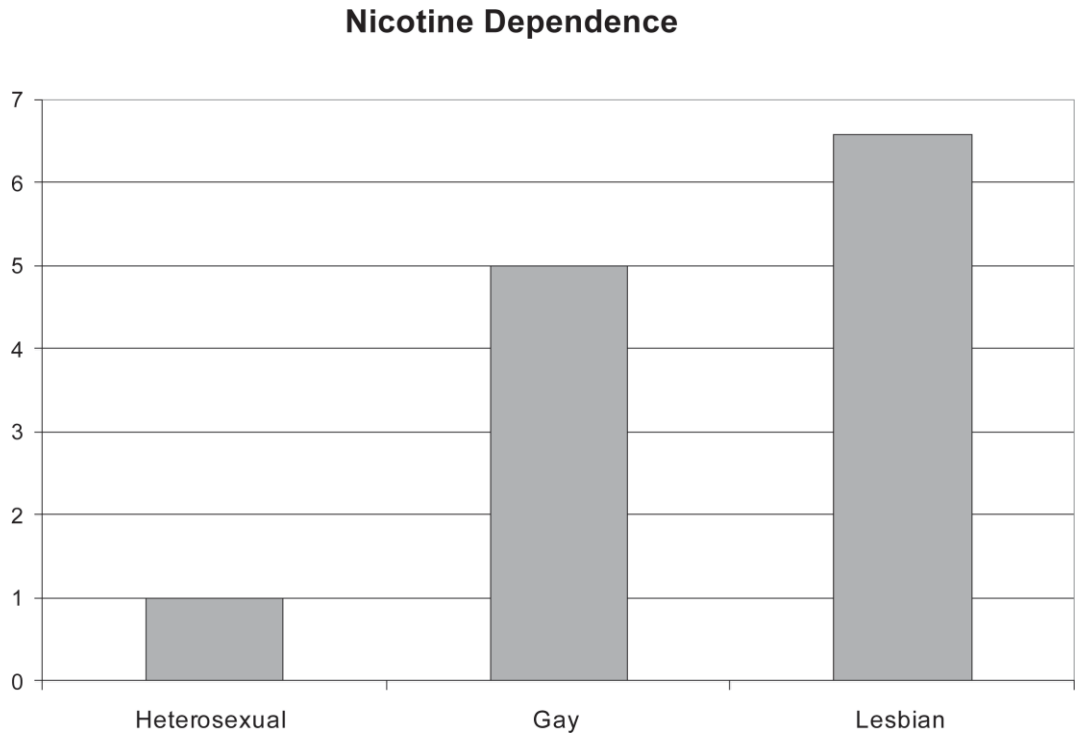

Figure 13. Nicotine Dependence, OR 5 men, 2.3–10.9 women (Fergusson et al., 1999; New Zealand). The mean of the range for women is used.

These figures result from a New Zealand longitudinal study. The findings are particularly interesting in view of New Zealand's strong anti-smoking attitude and far-reaching anti-smoking legislation.

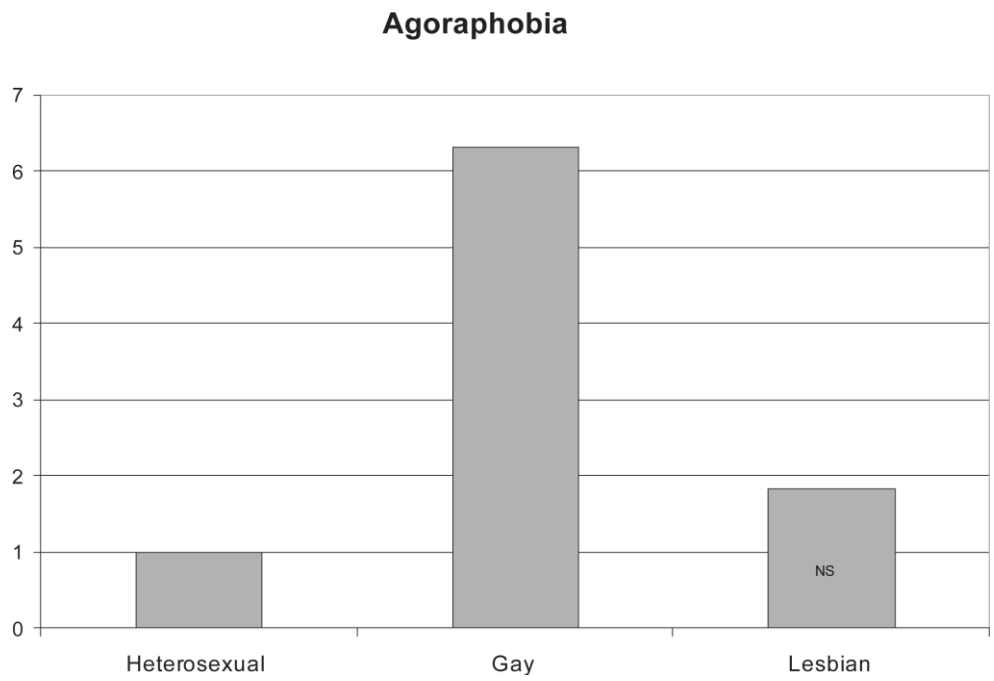

Figure 14. Agoraphobia (fear of being in public places), OR 6.32 men, 1.85 women (Sandfort et al., 2001; Netherlands).

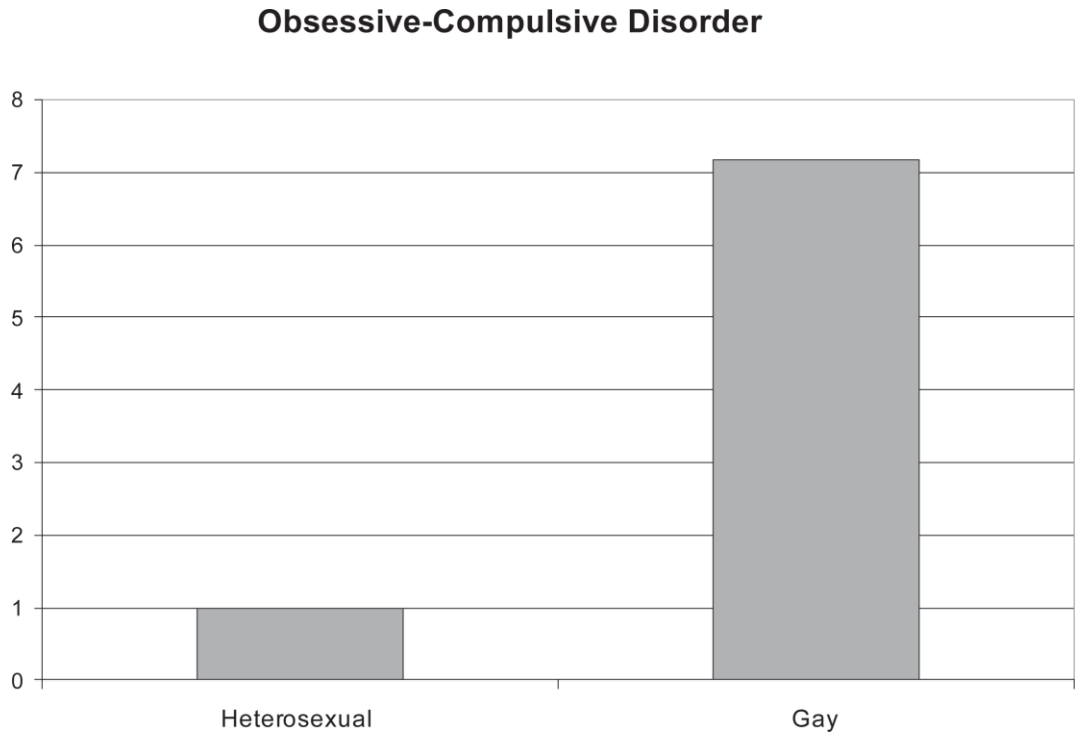

Figure 15. Obsessive-Compulsive Disorder, OR 7.18 men (Sandfort et al., 2001; Netherlands). There was zero prevalence for women in this sample, so the OR for women is not plotted.

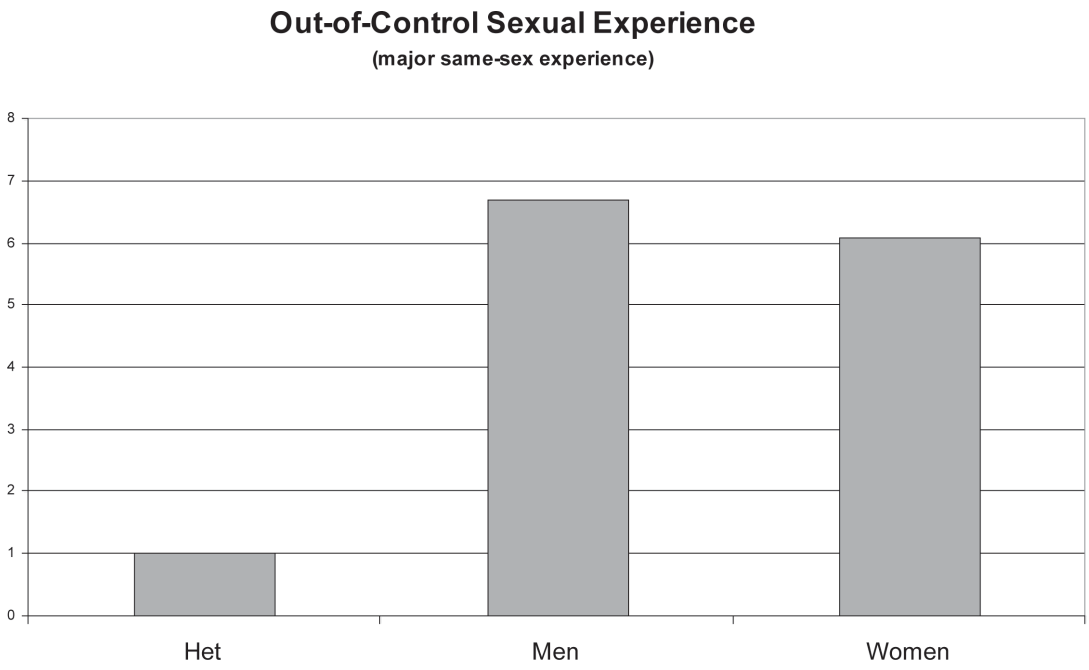

Figure 16. Sexual Compulsivity**.** OR 6.7 men, 6.1 women.

Although SSA persons who took a survey in a variety of street locations had elevated sexual compulsivity (Kelly, Bimbi, Nanin, Izienicki, & Parsons, 2009), it is likely that the people in those street locations were addicted to cruising and were therefore non-representative, so that survey is not used.

The better data shown in Figure 16 refer to self-ascribed "out-of-control sexual experience" in the Dunedin longitudinal study, which followed 1,000 people from birth for more than thirty years. The data are for those who had major same-sex experience. The authors point out that measure of "out-of-control sexual experience" might not capture those who denied that their experience was out of control (Skegg, Nada-Raja, Dickson, & Paul, 2010; New Zealand). This measure overlaps the established sexual compulsivity scale but is not identical with it.

This pathology is preferentially strongly associated with SSA and shows that SSA as expressed in physical contact has greater associated pathology than OSA expressed in physical contact.

Substance Dependency

The next three histograms for substance dependency are taken from McCabe, Hughes, Bostwick, West, and Boyd (2009) and involve a large survey of nearly 35,000 respondents. Respondents differentiated between use and dependence and between different degrees of current sexual identity, current sexual attraction, and lifetime sexual behavior. The resulting ORs are calculated based on attraction. Those who had no sexual experience after the age of twenty had very low dependencies for all three substances compared with heterosexuals. Those who had attractions but did not identify as gay or bisexual generally had fewer substance dependencies than those with a clear identity. An exception is bisexual women, who had a very high dependency on "other drugs" (OR 17.6). Although male SSA ORs for dependency are often significantly greater than for heterosexuals, female ORs are often significantly even higher.

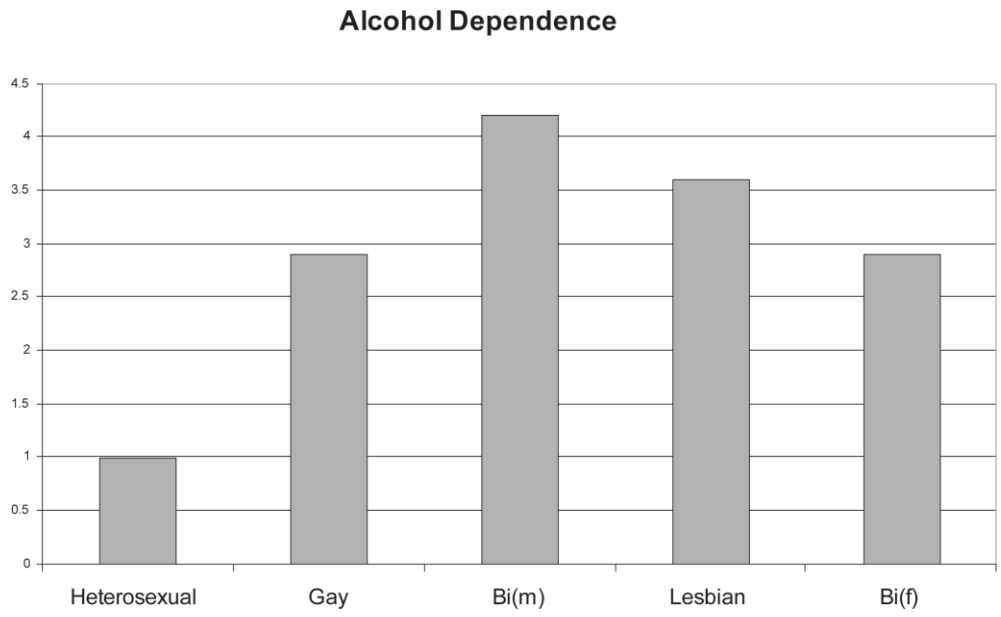

Figure 17. Alcohol Dependence, OR gay 2.9, bi (m) 4.2, lesbian 3.6, bi (f) 2.9 (McCabe et al., 2009; United States).

It was notable that reported alcohol *use* was no different in homosexuals and bisexuals from use among heterosexuals, but alcohol *dependence* was higher for gays, lesbians, and bisexuals. If the reporting by respondents is reliable, this implies that dependency may occur even with moderate drinking.

The data in Figure 17 are reasonably well supported in the smaller sample of Sandfort et al. (2001; Netherlands).

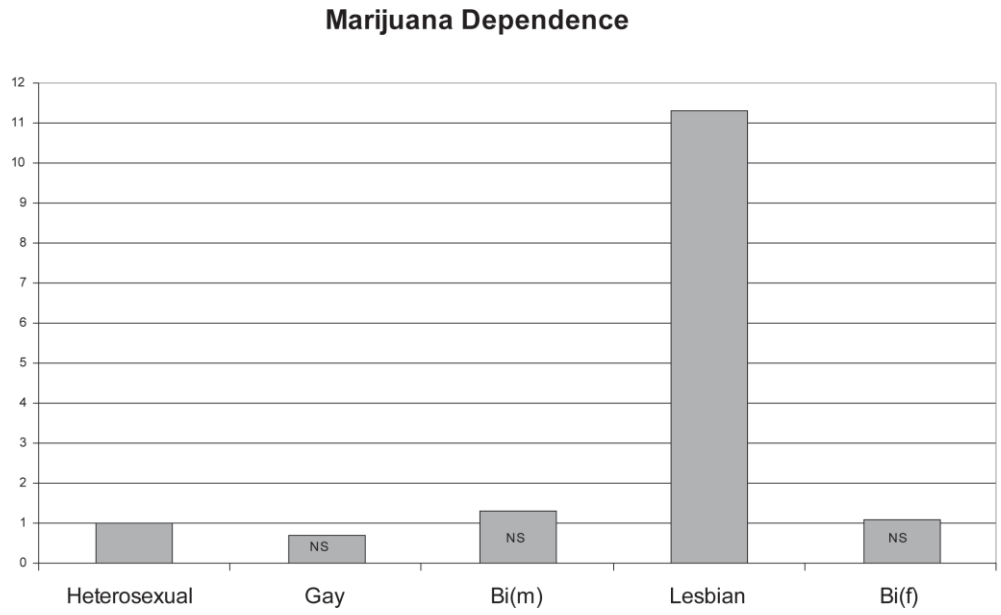

Figure 18. Marijuana Dependence**.** OR gay 0.7 (NS), bi (m) 1.3 (NS), lesbian 11.3, bi (f) 1.1 (NS) (McCabe et al., 2009; United States).

Marijuana *us*e was much higher for SSA respondents than was *dependence*; the only dependence significantly higher than for heterosexuals was among lesbians.

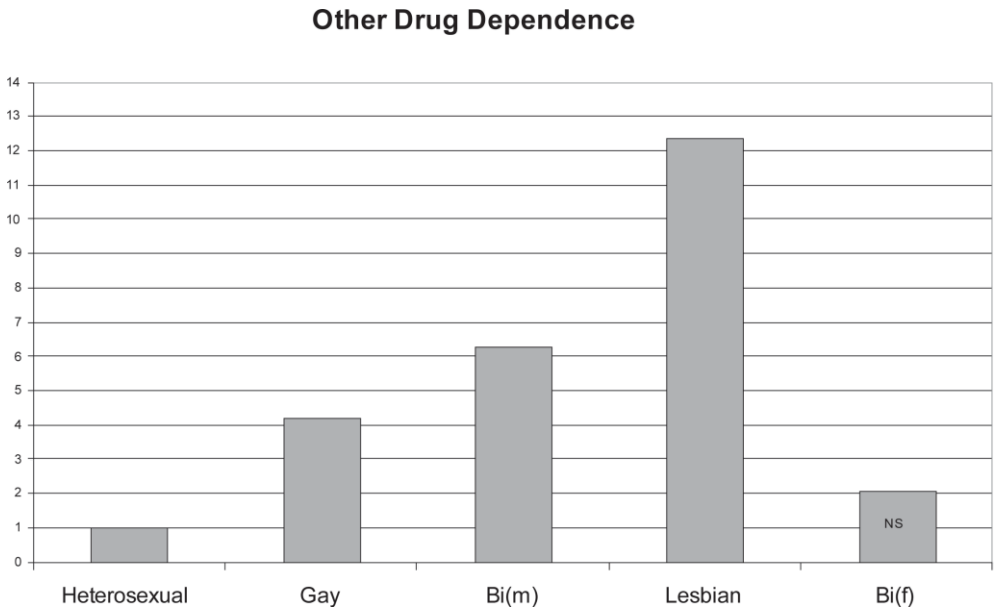

Figure 19. Other Drug Dependence**,** OR gay 4.2, bi (m) 6.3, lesbian 12.4, bi (f) 2.1 (NS) (McCabe et al., 2009; United States).

There is reasonable support for these figures from the smaller sample of Sandfort et al. (2001). A simple summary of other drug use beyond dependency is not possible.

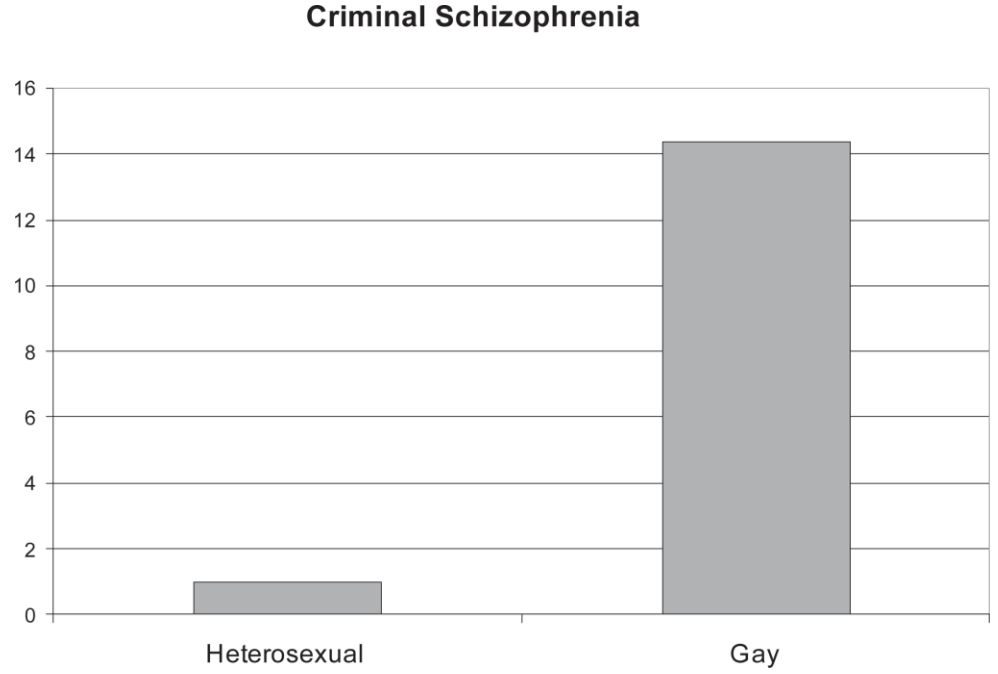

Figure 20. Schizophrenia plus Criminality, OR 14.4.

In this sample the group was overwhelmingly SSA (Alish et al., 2007; Israel). However, compared with other studies in this paper, it was a relatively small sample from consecutive admissions to a forensic unit in a justice system. Although it is highly statistically significant, the precise value has a larger margin of error than usual.

The result from this sample refers to schizophrenics who commit sexual crimes, not schizophrenics as a whole or the SSA population as a whole. So which came first—the SSA or the schizophrenia? Most often it was the SSA, with the first same-sex attraction occurring at about the age of ten, according to many studies.

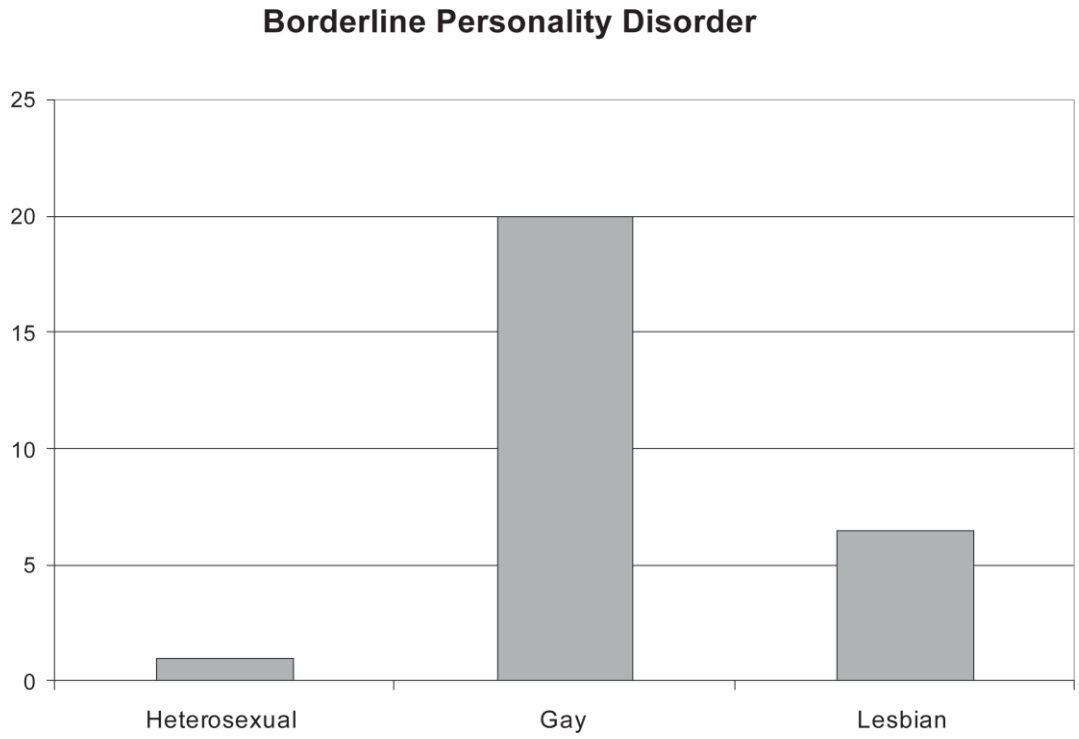

Figure 21. Borderline Personality Disorder, OR 20 men, 6.5 women (Sandfort et al., 2001; Netherlands). This includes instability in mood, unstable personal relationships, and disturbance in the sense of self; it may also include violence.

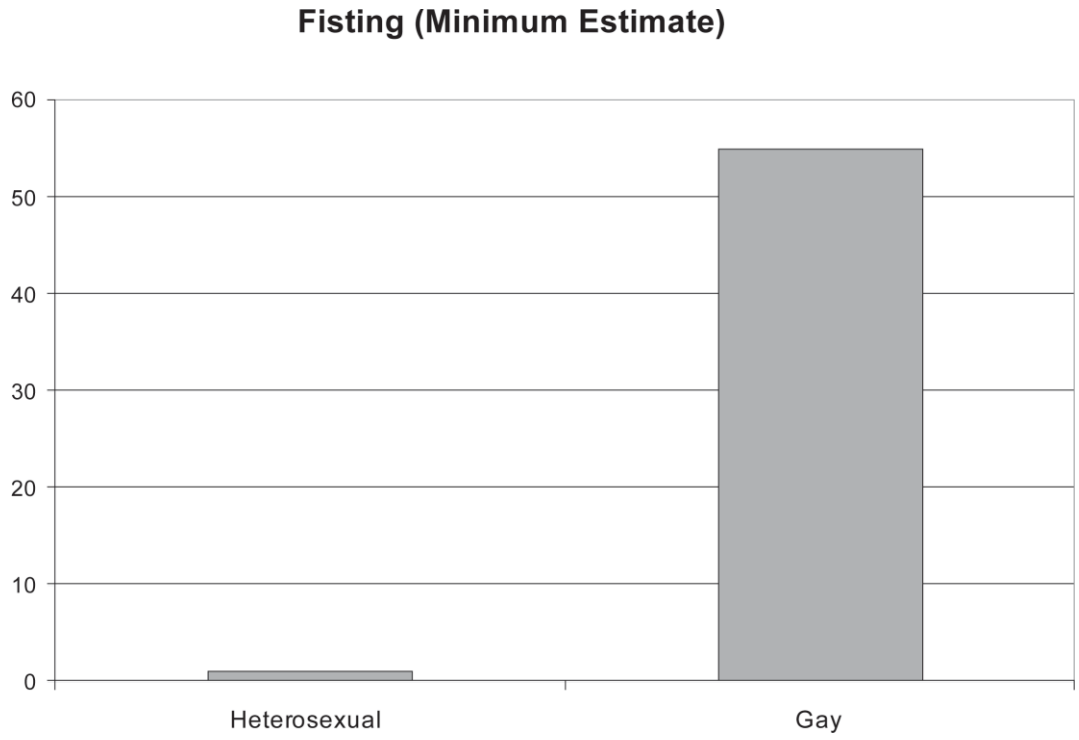

Figure 22. Fisting, OR 55 men only (Richters, Grulich, de Visser, Smith, & Rissel, 2003; Australia).

These results were based on a random sample of Australian adults; the figure is a minimum because of ambiguity in the paper cited. Fisting is included as one estimate of the DSM category "Paraphilias" (American Psychiatric Association, 2000) but better quantification is needed. Several tens of percent of lesbians have tried vaginal fisting. Comparable heterosexual data are not readily available but would probably show low prevalence.

Discussion of Mental Health Disorders

While it is not a DSM category, another example of pathology might be "suicidal risk-taking in unprotected sex" (van Kesteren, Hospers, & Kok, 2007). Such "suicidal risk-taking" may be calculated by taking account of the HIV infection prevalence in

OSA and SSA groups. Using that calculation, the increased OR risk in male SSA groups ranges between 200 times greater among homosexual men than heterosexual men in New Zealand, to about 500 times greater among homosexual men than heterosexual men in the United States. These clearly represent extraordinarily high risks.

Francis (2008) calculates that in the United States the health risk of unprotected receptive anal sex with a man is 3,500 times higher than that of vaginal sex with a woman. It is difficult to find similar risk-taking in other comparable-sized segments of society. This risk-taking is highly pathological and probably the most extreme of the risks surveyed in this paper.

As a rule of thumb, SSA populations have about three times the prevalence of many of the surveyed DSM characteristics than what is found in the general population, and sometimes a much higher prevalence. The slight tendency for bisexuals to have an even higher prevalence than the exclusive SSA group could reflect the additional stress arising from dual identity.

Those with psychiatric conditions are less likely to cooperate with surveys (Haapea et al., 2008), so the OR results above represent a minimum. The factor of three is the same as found among those injured in bus accidents and who subsequently suffer physical disability and resulting mental disorder (Mohanan & Moselko, 2009), which may be some illustration of the degree of psychological trauma experienced by the SSA population.

To conclude, there are many different pathological traits well established to be more prevalent in the SSA population than in the OSA population. *It is difficult to find a group of comparable size in society with such intense and widespread pathology,* despite the claims of some that SSAs are no more pathological than normal. (Prisoners in the United States have more intense pathology [90 percent with substance abuse or dependence and other mental conditions as a snapshot at any given time—Gunter et al., 2008], but since prisoners represent only 1 percent of the population in the United States, some might dispute the appropriateness of such a comparison.)

It is also possible that college-age people in the United States also have worse pathology (Blanco et al., 2008). About half of the college-age people have had a DSM condition within the last year, compared with half of the SSA people during a lifetime. Conditions among the college-aged are mostly substance-abuse-related and age-limited; results for the SSAs are not age limited but generally include the whole life up to the point of the survey.

There is clearly increased pathology in SSA people compared with their OSA counterparts; this is true to such an extent that some authors (Fergusson et al., 1999) speculated that any kind of mental disorder predisposes a person to SSA. One interpretation of this idea could be that the mental disorder precedes the SSA; this is like the situation seen in some animals where a failure of discriminatory power (such as olfactory) leads to indiscriminate courting behavior with all sexes. There is no evidence for this in SSA people, and the theory in this form is not likely. In SSA people, there is positive attraction toward the same sex, not failure to discriminate. Even among bisexual people, most experience different, not similar, attractions to each sex. Further, using a computer model, Lung and Shu (2007) found no occurrence of SSA resulting from poor mental health among military recruits in Taiwan. Finally, the usual history of mental disorders among SSA people is awareness of SSA followed by depression and suicidality—making it likely that the SSA produced the disorders rather than the disorders producing the SSA.

There is an amazing variety of mental disorders associated with SSA, and there is little in common among many of them other than general disturbance and disruption of the psyche. It is initially difficult to see how SSA itself could lead to such a large variety of outcomes. Why, for example, should SSA—a single condition—produce conditions as diverse as bipolar disorder, schizophrenia, and obsessive-compulsive disorder? Yet the associations are quite strong.

It is conceivable that the intense connection-euphoria/rejection-despair motif in SSA stories might lead to bipolar disorder in some people. It is also conceivable that the

enhanced sexual compulsivity in some SSA people might lead to the compulsivity of obsessive-compulsive disorder.

A frequent commentary is that there is a clear tendency for SSA men to have higher rates of conditions more common in heterosexual women (mood disorders), and for SSA women to have higher rates of conditions more common in heterosexual men (substance abuse). This is not what one might expect. If societal attitudes were the only factor, there should be an intensification of gender-linked *heterosexual* mental health patterns, but there is not. The reversed pattern argues a closely sex-orientation-linked origin. In other words, the SSA may be inherently productive of this gender-reversed pattern.

Consequences for Therapy

Rekers (2005) reported that the majority of gay, lesbian, and bisexual people have at least one psychiatric disorder in their lifetime, and the New Zealand study (Fergusson et al., 1999) reported that 70 percent of these people have more than one psychiatric disorder during their lives. A University College of London study (King & McKeown, 2003) found that two-thirds of people with SSA have a lifetime mental disorder, compared with one-third of the heterosexuals. However, this general difference between SSA and OSA of 2:1 is less than the ORs generally found (as detailed above), which are usually 3 or more. Part of the reason for this disparity is the contribution from college-age substance abuse to the OSA data.

The higher prevalence of disorders in SSA people has social implications, particularly in the increased need for therapy resources. A general therapeutic client may be depressed, but that client usually suffers from only one condition—in other words, the client is usually not also violent. One conclusion from the research is that most clients presenting with unwanted same-sex attractions have not only the unwanted SSA condition, but are also likely to have a psychiatric condition. Therapists may subsequently be faced with more challenging therapy because of the second condition. Therapists in general are usually aware that it is essential to look at some of the other issues before

addressing same-sex attraction; for example, the effects of sexual abuse or suicidality are more urgent therapeutically than SSA.

Interestingly, a survey of many mental conditions (Cerda, Sagdeo, & Galea, 2008) was able to show that when two conditions were present, either could produce the other. As an example, depression may cause alcoholism, but alcoholism may also cause depression (Marmorstein, 2009). Treating one condition, then, may greatly help another. Similarly, treating a mental condition that co-occurs with SSA (such as social anxiety) may sometimes lead to improvement in the SSA, even though the SSA was not specifically addressed (Golwyn & Sevlie, 1993).

What should the therapeutic response be to a group that has such difficulties in life? As with any client, compassion and empathy should be foundational in the therapeutic approach. In addition, it may be important to understand that other issues may be present and may need to be explored and addressed. Further, when working with clients who present multiple problems, it should be expected that the therapeutic involvement may be deeper and more prolonged than usual.

The co-morbidities and greater difficulties associated with SSA may also cause many people to seek change of orientation and/or lifestyle. Some SSA men and women may desire a life less encumbered and may therefore seek change. Requests for change should not be dismissed or handled lightly, but need to be understood in the larger context.

Origins of Poor Mental Health

Why is mental health worse among people with SSA? Stigma and discrimination are given as explanations. The following material—examining mental health conditions in general and suicidality as a specific—argues that stigma and discrimination are an unexpectedly small part of the whole.

Is local law a factor? Hatzenbuehler, Keyes, and Hasin (2009) find a correlation between lack of antidiscrimination legislation in various areas of the United States and

poorer mental health among gays and lesbians. This implies that legislative environment may produce poor mental health in SSA people. However, those least affected by mental health issues plausibly relocate to areas where more favorable legislation exists. Other similar studies will need great care in allowing for similar confounding factors.

How important is sexual abuse? Bartholow et al. (1994; see Figure 23) found that SSA people who had also been sexually abused had an OR of 1.5 for worse mental health. In other words, they maintain that sexual abuse is one factor associated with poor mental health. However, the gap to the OR 3.0 figure for SSA people is much larger than the 0.5 increment compared with the OSA. If that gap is due only to societal oppression, the implication is that it is experienced as being about three times as bad as sexual abuse, which is hardly credible.

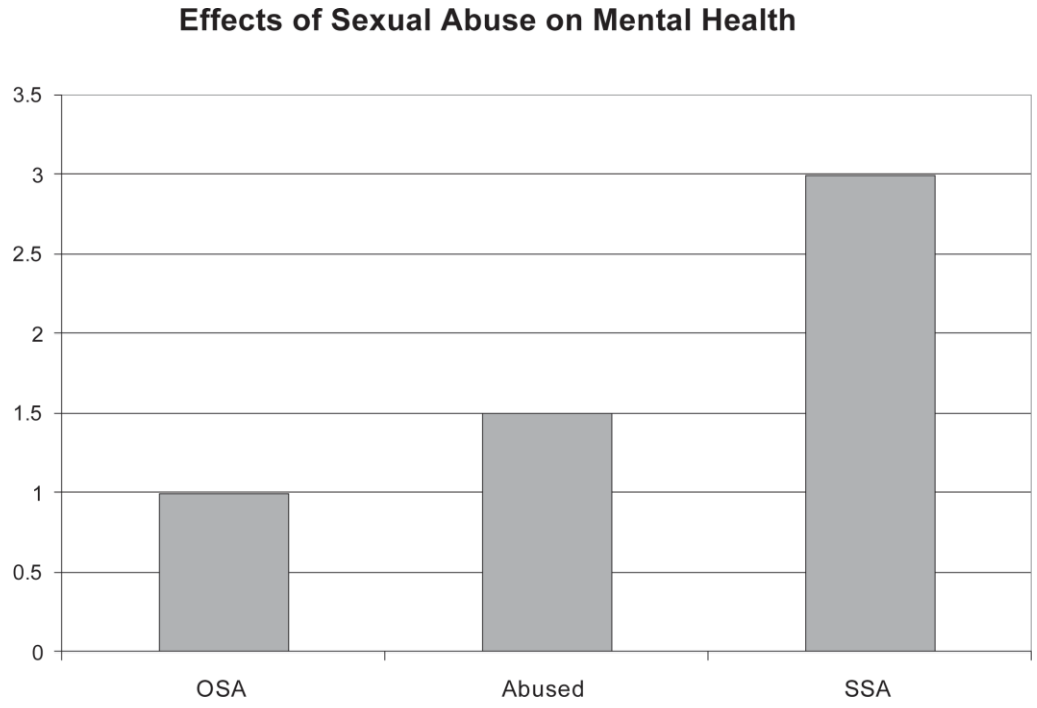

Figure 23. Effects of Sexual Abuse; OR 1.5 abused and 3.0 SSA.

Quantitative modeling by Frisell, Lichtenstein, Rahman, and Langstrom (2009) showed that perceived discrimination and victimization of people with SSA accounted for a significant

part of the mental health burden; they maintain that the rest stemmed from genetic/family factors. This discrimination against SSA is called *minority stress* in recent literature.

Hamilton and Mahalik (2009) found that minority stress was not directly associated with illicit drug use, but reaction to perceived social norms together with minority stress had some contribution. Only 13 percent of the effects on drug-taking are explained by the model, so minority stress was not a strong factor, and most reasons for drug use were not explained.

McCabe, Bostwick, Hughes, West, and Boyd (2010) examined the interaction between minority stress, racial discrimination, and gender discrimination (such as homophobia, racism, and genderism) and their influence on illicit drug-taking. Minority stress by itself was not a significant factor, only proving significant when part of a gender/race mix. Race by itself was the strongest factor (OR 3.2); adding in gender and minority stress increased the OR only slightly to 3.85. Discrimination on the grounds of sexual orientation seems to have only a minor effect. Similarly, Selvidge, Matthews, and Bridges (2008) found no effects of heterosexist or sexist experiences on lesbians' psychological well-being.

In the California Quality of Life Survey data set, Cochran and Mays (2009) found an association of poor mental health with HIV infection—another possible cause of poor mental health in SSA males. It is not surprising that HIV infection might have a significant effect, but the direction of causality is not yet established, and the effect has not been consistently found in other studies.

Origins of Depression

Contrary to the finding for suicide (considered next), the frequently used scale of internalized homonegativity has been shown to have moderate to strong connection to three forms of depression (Rosser, Bockting, Ross, Miner, & Coleman, 2008). The homonegativity scale measures negative statements about homosexuality said to be typical of attitudes in the society at large, and the implications in the literature are

that internalizing these allegedly false statements leads to depression. However, some statements on the list are true in general, such as "Gay men are more promiscuous than straight men" or are true for individuals, such as, "It is important to me to control who knows about my homosexuality." It is not surprising that believing these statements leads to depression. This in itself does not clearly show that society is to blame, and indicates that depressive reactions may be in part a reaction to the truth.

Similarly, Josephson and Whiffen (2007) found the greatest contribution to depression for homosexual males was a disjunction between their ideals of masculinity and the reality they themselves experience. Other examined character traits had more minor contributions.

Causes of Suicide

There is little direct evidence that the prevalence of completed suicides as compared to attempted suicides is higher for SSA people. Work quoted by Hendin (1995) from a study by Shaffer suggested that actual completed suicides were proportionately about the same for OSA and SSA individuals, so perhaps only the attempted suicides were more frequent among SSA people.

However, Mathy, Cochran, Olsen, and Mays (2009) studied a large Danish sample of SSA people. Those contracting Registered Domestic Partnerships had an OR of 1.65 (NS) for women and 8.0 for men who completed suicide. This seems to establish that completed suicides are more common among SSA individuals than among heterosexuals, at least among men. However, the domestic partnership dynamic itself may not be entirely typical of conditions generally for the SSA population and may lead to a biased result.

Does Stigma Create Suicides?

Does discrimination/stigma/bias cause suicidality? Real discrimination obviously exists. It is suggested that the real cause of suicide is the individual's reaction to

perceived discrimination and a particular style of coping that is less common among heterosexuals. Whether the discrimination is perceived or real, however, there are actual and deleterious effects on the individuals concerned.

It is very common for researchers to assert that discrimination, abuse, and vilification are causes of suicidality. While this sounds reasonable, there is remarkably little quantitative support for this in published papers, in which most authors are careful to use the qualifying term *perceived*.

Discrimination as a Cause of Suicide

Ridge, Plummer, and Peasley (2006) said that men with SSA reported feeling like perpetual outsiders, regardless of their level of achievement in life. This feeling of rejection obviously may cause suicidal feelings.

Diaz, Ayala, Bein, Henne, and Marin (2001) found that social discrimination reported by gay men was a strong predictor of suicidal ideation. Those researchers, however, thought the discrimination referred to resulted from poverty and social isolation rather than homophobia. Violence experienced as a child (OR 3.5) and adult fed into this more strongly than adult ridicule. The researchers commented that the people who were suicidal had low resilience—in other words, they were more affected by the circumstances than others would usually be. Overall, only 38 percent of the suicidal ideation was explained. This means that even the factors they identified were not the major causes.

In an Internet survey (Hillier, Turner, & Mitchell, 2005) that included those who had attempted suicide, only 35 percent thought homophobia was the reason, again suggesting that such "discrimination" was not a major cause. It needs to be remembered, however, that Internet surveys are not always representative of the entire population.

D'Augelli et al. (2005) found that parental knowledge and disapproval of the person's sexual orientation was a factor in suicidality. Psychological abuse from parents was by far the most important factor in their view. But Hegna and Wichstrom (2007)

maintain that nonacceptance of sexual orientation by family and friends is not a factor in suicidality. Suicidality was also related to victimization. Obviously, the potential causes of suicidality need further investigation and better quantification.

Some papers implicate discrimination as a cause of suicidality, but less than one might expect. In summary, although this is very rough, the figures in the more quantitative papers above point to no more than a 30 percent to 40 percent influence. The research below suggests the figure is less.

Doubts About the Importance of Discrimination

Shaffer, Fisher, Hicks, Parides, and Gould (1995) found that suicide attempts did not follow stigmatization episodes. They did find that there *was* psychiatric disturbance (probably depression) before suicide attempts.

Hershberger and D'Augelli (1995) similarly found victimization was not directly related to suicide; independent suicidal thinking was as important as victimization. They found that family support was very important in helping avoid suicide.

A number of papers cast fairly strong doubt on whether discrimination, objectively measured, has any effect at all. Eisenberg and Resnick (2006) found that discrimination was not very involved in suicidality and that other factors were predominant.

Paul et al. (2002) mention that the mean age for suicide attempts among SSA people has declined over the years. In spite of greater acceptance in society, then, there are earlier attempts, so suicide trends are contrary to the trends of opinion in society. Quoting D'Augelli et al. (2005), they mention that the greatest attempt frequency was at the point where young SSA people were aware of their sexual orientation but were not yet out of the closet.

Ross (1988) described how the United States, the Netherlands, and Denmark compared for rates of suicide among SSA individuals. There were no differences in

spite of different levels of acceptance. Following work from 1978, Ross thought that *perception* of societal reaction was the main point. Ross also found a correlation between *perceived* hostility and psychological adjustment.

More current studies have identified essentially the same suicide rates among SSA people in the United States, the Netherlands, New Zealand, Denmark, and Norway. Based on that finding, it is not likely that varying societal attitudes have much to do with suicide rates.

Almeida, Johnson, Corliss, Molnar, and Azrael (2009) show that SSA youth have much higher suicidality, suicidal ideation, and self-harm than their non-SSA peers (OR 6); it should be noted that most of their sample were racial minorities. ORs of 6 are also found for SSA/OSA comparisons in racial *majority* situations, as mentioned earlier (see Figure 12). It would seem very possible that the dual burden of race and SSA would result in a much higher OR than 6; this expectation is shown in Figure 24.

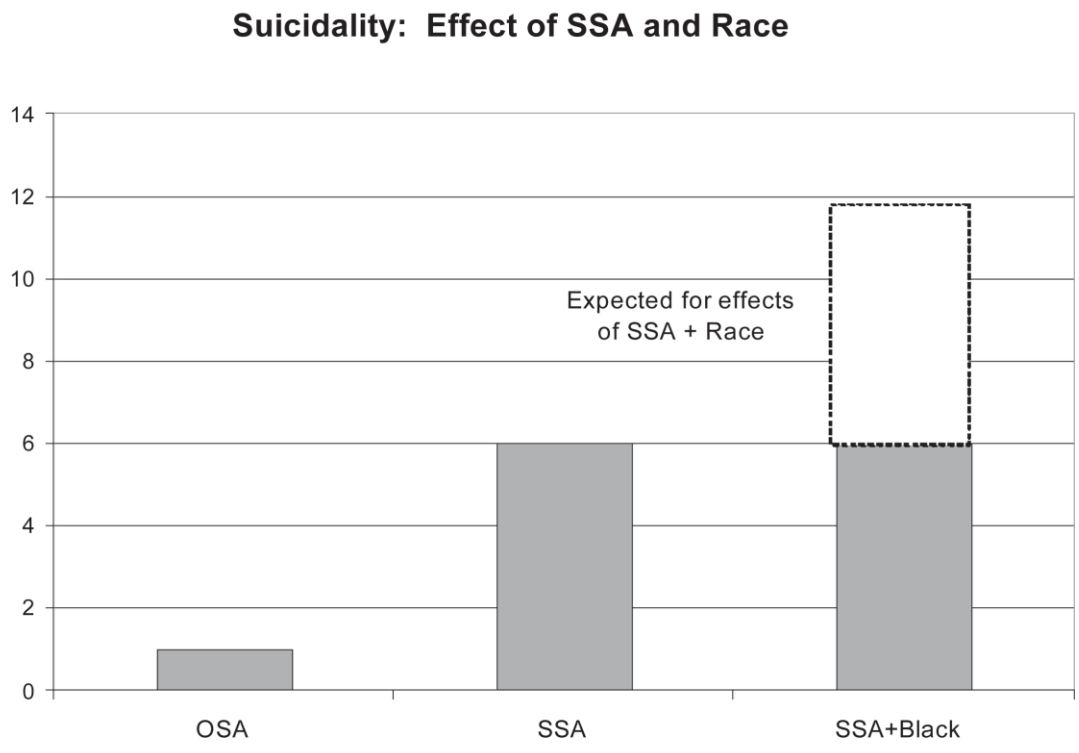

Figure 24. The missing effects of combined race and SSA.

A similar finding for adults was reported by Cochran, Mays, Alegria, Ortega, and Takeuchi (2007); the level of suicidality among sexual orientation minorities in racial minorities is about the same as for SSA Caucasians. One would expect the suicidality to be much higher in the racial minorities because of the extra burden of racial discrimination. Meyer, Dietrich, and Schwartz (2008), and Kertzner, Meyer, Frost, and Stirratt (2009) report similar data. Some of Kertzner et al.'s data contradicted the other literature—a gay or lesbian identity was associated with positive social/psychological well-being. The idea of discrimination leading to suicide is therefore at least doubtful. Quantitatively it is likely to be quite a minor factor.

A study cited in Plöderl and Fartacek (2009) examined those registered for homosexual partnerships in Denmark (Qin, Agerbo, & Mortensen, 2003). Among that group, the enhanced suicide rate for SSA people remained constant. This marriage parallel, although a supportive "non-discriminatory ceremony," did not reduce the suicide rate. However, the study may prove not quite typical because it was conducted early in the period when the marriage ceremony became available (1994–1997).

Meyer (1995) found in a careful study that homonegativity (internalized homophobia) accounted for only 8 percent of the influences leading to suicide attempts. This small number and weak effect emphasizes that this is not an important facet for most SSA people, in spite of the very common media assertions to the contrary. A similar weak effect for victimization as a cause of suicidal thoughts was found for adolescents (Poteat, Aragon, Espelage, & Koenig, 2009).

Factors other than societal oppression are important in suicidality. In very approximate numerical importance, based on the surveys referenced below, these factors include sexual relationship breakup, relationship difficulties with others (including families), and substance abuse. Stigma is probably fourth in the list in terms of importance.

Relationship Breakup as a Cause of Suicide

Bell and Weinberg (1978) said that breakdown in relationships was often a cause of suicide. This assertion is spelled out more fully in other studies.

In his book, *Suicide in America,* Hendin (1995) wrote:

> Homosexual rejection was the usual precipitating event for the suicide attempt. Suicidal homosexuals typically attributed all their unhappiness to rejection, but it was clear that unhappiness and rejection formed intrinsic parts of their relationships. When these students were not being rejected in their homosexual relationships, they were the ones doing the rejecting. Although this pattern also emerged among homosexual students who were not suicidal, homosexual students who were suicidal had abandonment and death at the center of their adaptive history. (p.137)

He also mentioned the life-or-death "I can't live without you" quality that suicidal homosexual students gave their relationships (Hendin, 1995). This was hardly surprising—the rare friends they had were more valued than usual.

Hendin's comment implies that SSA youth are actually more extreme in this regard than heterosexuals. He implies unusual levels of rejection toward some SSA friends and unusual levels of acceptance of others. There is both intense connection and intense rejection, and dramatic shifts between the two seem to occur (Hendin, 1995).

Because median numbers of sexual partners are perhaps three times those of heterosexuals (Laumann et al., 1994), one might assume three times the tendency to suicide, as found. This could warrant further investigation.

Although it is tempting to imagine that breakups are due to discrimination, the gay researcher West (1977) thought otherwise, saying that "these social difficulties do not really explain the frequent breakup of male affairs from internal dissension rather than outside pressure" (p.164).

Family rejection, sometimes partly because of SSA and confused with it, is also a suicide factor (Ryan, Huebner, Diaz, & Sanchez, 2009), particularly for young people. This was mentioned previously for other mental health issues.

Substance abuse may also lead to suicidality. Besides the well-known consequence of depression, substance use is associated with paranoia, which can lead a person to believe that society is personally rejecting him or her. This is exemplified by the work of Alterman, Gerstley, Strohmetz, and McKay (1991), who found that alcoholics with antisocial personality disorder have significant paranoia. A similar finding emerged from Fleischhacker and Kryspin-Exner (1986), who found that both drug use and alcoholism create paranoia or over-sensitivity to criticism and consequent depression. The association of substance use with SSA and suicidality warrants further exploration.

Inherent Suicidality?

Some researchers thought suicidality might be inherent in being SSA. Skegg, Nada-Raja, Dickson, Paul, and Williams (2003) noted that suicide attempts increased even with SSA that was too minor to be noticed by outsiders or to be discriminated against. De Graaf et al. (2006) noted a significant remnant association of SSA with suicidality when other factors were allowed for; their findings held only for men, and none of the suicidality was attributed to discrimination. This suggested a correlation between the suicidality and the SSA itself.

In conclusion, many papers suggested that factors other than societal attitudes were involved in suicide attempts.

Coping Style and Suicidality

One important strand in this literature is the concept that a significant amount of the emotional distress and harm experienced by SSA men results from specific internal

styles of coping. Some types of coping among SSA people lead to increased depression (Auerbach, Abela, Zhu, and Yao, 2010). According to Sandfort, Bakker, Schellevis, and Vanwesenbeeck (2009), there are three main styles of coping with problems: task-oriented (most common among OSA men), emotion-based, and avoidance-based. Most of those in the SSA sample used emotion-based and avoidance-based coping styles.

Sandfort et al. (2009) noted:

> The higher prevalence of health problems in homosexual compared to heterosexual populations is usually understood as a consequence of minority stress. We hypothesized that differential rates of health problems also could result from sexual orientation-related differences in coping styles. *Emotion-oriented and avoidance-coping mediated the differences in mental and physical health between heterosexual and homosexual men*. (p. 253, emphasis added)

In quantitative terms, coping style *completely* accounted for the differences between heterosexuals and homosexuals. There was actually no room for stigma or discrimination as a factor. This might still be consistent with the finding of Rosser et al. (2008) that internalized negativity had a moderate to strong correlation to mental health problems. Under this scenario, SSApeople would react negatively to negative statements about SSA and would use avoidant or emotional coping mechanisms. In other words, we are looking at reactions internal to males reporting SSA—reactions that are primarily differences in reaction to stresses, particularly discrimination. In striking contrast, heterosexual-directed criticism by homosexual people would rarely be perceived as very negative by heterosexuals, who would tend to brush criticism aside.

A similar deficit in emotional regulation was found in sexual minority adolescents of both genders (Hatzenbeuhler, McLaughlin, & Nolen-Hoeksema, 2008), which deficit mediated various mental conditions. According to Mosack et al. (2009), “coping self

efficacy" (a similar factor) correlated with the intrusiveness of symptoms for both heterosexual and homosexual men. Lesbians seemed immune.

One result of these findings is that therapists should not simply assume that society is to blame for DSM co-morbid conditions. Some may be the result of societal pressures, but on average the cause lies elsewhere. Co-morbidities should be investigated on a case-by-case basis and may be amenable to therapeutic intervention.

The truth is that discrimination is not as great as it is perceived to be, but that probably doesn't matter—the result is the same: perceived discrimination leads to cross-culturally constant attempted suicide rates. Changes in society and societal attitudes may be desirable but are somewhat beside the point in terms of suicide prevention.

Suicide Resulting from Therapy?

It would be devastating to any form of therapy to find that it consistently produced an excess of suicides. This section suggests that therapies for unwanted SSA do not result in an excess of suicidality, but there are nonetheless important internal nuances.

Surveys done a few years ago tried to determine positive or negative outcomes of therapy for unwanted SSA. None had other than convenience samples. One of the first was an 800-client survey (Nicolosi, Byrd, & Potts, 2000) that reported positive outcomes; later studies included Shidlo and Schroeder (2002), Spitzer (2003), Jones and Yarhouse (2007), and Karten and Wade (2010). The latter three found and reported mostly those who had positive experiences, particularly reporting change in sexual orientation. Shidlo and Schroeder (2002) sought those who had negative complaints but found a significant number of persons who reported positive experiences. Among negative experiences were a worsening in self-image and attempted suicides, sometimes ascribed to therapy.

From Shidlo and Schroeder's (2002) account, twenty-five people were involved in suicide attempts before therapy, twenty-three attempted suicide during therapy, and eleven attempted suicide after therapy. Figure 25 graphs the attempts allowing for the

time periods involved and compares them with the expected suicidality for the same time frame without the effect of therapy.

From Shidlo and Schroeder's (2002) demographic description, it can be inferred that the respective mean time periods involved were thirteen years, two years, and ten years. Therapy was brief compared with the surveyed times before and after therapy. (The pre-therapy figure of thirteen years assumes an estimate of the establishment of a gay identity at a mean of fifteen years). If distributions are highly skewed, adjustments may be needed to the time period estimates. Taking into account the time periods involved, the expected suicide attempts (rounded down), assuming therapy had no effect, would be twenty-nine, four, and twenty-three, assuming an equal rate per year in all three periods.

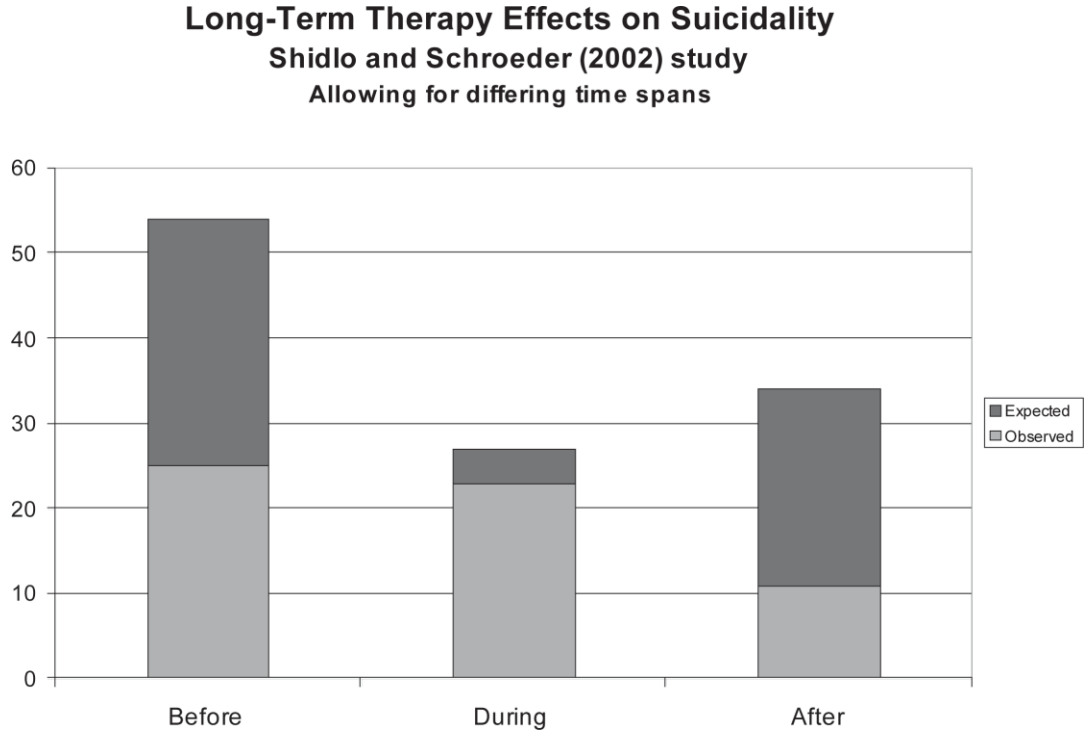

Figure 25. Varying suicidality related to SSA therapy.

A comparison of the expected and observed suicide rates before, during, and after therapy shows that there is a relatively high number of attempted suicides *during* therapy (four

expected but twenty-three observed), and an unusually small number after therapy (twenty-three expected but eleven observed). However, in the statistical treatment that follows the group studied by Shidlo and Schroeder (2002), the summary is:

(a) Comparing pre-therapy, therapy, and post-therapy groups, there is overall no significant increase in suicides per unit time.
(b) There is a very clear increase in attempts during therapy.
(c) There is a trend to fewer attempts after therapy.

Each of these should be examined in detail.

(a) Suicide attempts reported before therapy were 25, and those reported during and after therapy combined numbered 34. The expected numbers allowing for the time periods and normalized to the above total are 30.55 and 28.44. The expectation on which this is calculated is that therapy has no effect, either positive or negative. This is the most conservative possible assumption, and a control group is unnecessary. An even more extreme assumption would be that therapy offers some protective effects, but that assumption is ruled out by the convention that the assumption of null effects is the usual null hypothesis A chi-square test gives a value of $p = 0.14$. In other words, no difference has been demonstrated and there are apparently no increased numbers of attempts during and after therapy combined. Although the conclusion that overall these therapies did not significantly increase attempts is an important one, this is unnecessarily broad-brush, and examination of the two periods (during and after therapy) gives a much more nuanced picture.

As mentioned, an examination of the figure above shows that there appear to be far more attempts during therapy than expected, and fewer attempts than expected after therapy.

(b) For attempts before and during therapy, the observed results are 25 and 23, and the calculated expected normalized figures are 42.18 and 5.82. These are very different from the observed, and the chi-square test produces a result of $p < 0.001$. They are not the

same, and therapy has therefore been associated with a several-fold increase in attempts. However, other literature shows that this is actually a predicted pattern (see below).

(c) The observed results of attempts before and after therapy are 25 and 11, and the calculated expected normalized results are 19.68 and 16.30. The result of the calculation is $p = 0.075$. A statistical result < 0.1 and > 0.05 is usually called a "trend," in this case to fewer attempts after therapy. However, further inspection of the data shows that this result was quite sensitive to sample size. If only one extra person with no suicide attempts after therapy had been added to the sample, the result would have attained the usual $p = 0.05$ level of significance, and the conclusion would have been that therapy was associated with a significant diminution of attempts.

How likely is it that a really representative balance of satisfied and dissatisfied consumers of sexual orientation change efforts would attain a really significant statistical level? Shidlo and Schroeder's (2002) sample contained 26 satisfied and 176 dissatisfied (87 percent) clients. It is unlikely that this represents the distribution of satisfaction among previous clients for the average therapist, so the reduction in suicidality would almost certainly be even larger and more statistically significant with a more representative sample. There is obviously a need for a fuller survey to establish this conclusion more precisely. This is a rather trivial conclusion—in some respects, anyone encouraged to adopt a less risky lifestyle may be expected to experience very good long-term effects accompanied by a probable reduction in suicidality.

This means that the previous null result (Shidlo and Schroeder, 2002)—no overall increase in attempts comparing those before therapy with those during and after therapy—was the result of a combination of an increase and a decrease that roughly statistically cancelled each other.

Does this mean that therapy is inherently dangerous? Actually, it reflects the universal pattern seen in all psychotherapy. As demonstrated numerous times (e.g., Erlangsen, Zarit, Tu, & Conwell, 2006; Qin & Nordentoft, 2005; Qin et al., 2006), when

psychiatric patients are admitted to a hospital, attempted suicide rates rise to a very high level in the first week after admission. There is usually a secondary peak in suicide attempts the first week after discharge, followed by a strong long-term decrease to well below pre-admission rates (Erlangsen, Zarit, Tu, & Conwell, 2006; Qin & Nordentoft, 2005; Qin et al., 2006). The high admission rate is reminiscent of the rather well-known pattern that those rescued with major time delays—such as those rescued from mine disasters, mountaineering accidents, and shipwreck, as examples—often die soon after being rescued. In a kind of psychological reaction, once rescued ("under treatment"), they give up on their heroic endurance (Golden, David, & Tipton, 1997).

The suicidality of those with unwanted SSA follows the same pattern as those with diagnosed DSM disorders. Limitations on demographic descriptions in the above-cited papers (Erlangsen et al., 2006; Qin & Nordentoft, 2005; Qin et al., 2006) do not allow detailed comparison of the increased rates in suicidality during hospital admission to compare with SSA therapy rates but, using conservative demographic assumptions, preliminary calculation suggests increased rates are probably comparable.

Unfortunately, the polarized political reactions to SSA therapy are such that both negative and positive effects may have been significantly exaggerated.

Consequences of SSA Therapy

The conclusion of this statistical examination for therapists would be that overall the suicide attempts were not markedly higher in therapy than before therapy, but that there was a peak in attempts during therapy among those who had preexisting DSM conditions. A continuance of conventional surveillance would be prudent.

Summary of Causes of Mental Health Issues

The causes of psychopathology among SSA people require more research. For example, how much does substance abuse effect psychopathology? There is little

evidence that SSA societal stress leads to these endpoints. There is positive evidence for coping style being a major factor. For suicidality, factors that are certainly involved include sexual abuse, relationship breakup, and other personal relational difficulties. The relative quantitative strength of these needs to be better clarified. Various forms of therapy would be the most helpful option.

General Conclusions

SSA people have a lamentably high variety and intensity of mental health conditions, and there is evidence that this is much less due to societal pressure and attitudes than commonly supposed. Conversely, disorders are much more due to particular psychological coping mechanisms than usually supposed. The gender-reversed nature of these conditions argues a link to the SSA itself. Causes of suicide among SSA people are probably a result of *perceived discrimination* involving oversensitivity rather than actual discrimination, but are also due to relationship breakup and depression linked to substance abuse. They are unlikely to be much improved by societal change—the origins are within the SSA person and can probably be investigated within the therapeutic process.

Gay, lesbian, and bisexual populations are demanding the right to be free from all events that trigger their unusual sensitivity. However, that demand threatens to swallow the entire legal system, educational system, religious denominations, and professional bodies in many countries, and there is very little evidence it will make a significant difference to the mental health or suicidality of homosexuals. Therapy is more likely to have a positive impact and should be provided with attention to meeting the goals of the client and not taking lightly the varying needs and issues that may need to be addressed.

The body of literature on co-morbidities may also demonstrate a possible reason that some people are dissatisfied with their orientation and/or lifestyle and may seek change. Therapists should be sensitive to such requests—not simply dismissing them, but providing therapeutic assistance to help dissatisfied clients pursue their desired goals.

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